Laptop Ergonomics

Today, many computer users have turned to convenient portable laptops as either an adjunct to their work stations, or as an alternative to a desktop computer. Just as desktop computers have specific guidelines and recommendations for safe and healthy use, so do laptops. For example, the laptop design of having the screen attached to the keyboard means that if the keyboard is optimally ergonomically positioned for the user, the screen is not, and if the screen is optimally ergonomically positioned, the keyboard is not. The following is a list of things to consider and try to promote and ensure comfort when using laptops.

Typing & Viewing

- Set up the laptop keyboard, much like you would your regular keyboard. Elbows should be level with or slightly higher than the keyboard (elbows at approximately 90 degrees, wrists level, upper arms hanging as vertically as possible).
- Try using a chair that does not have arm rests so that you will have room to move your arms.
- If you have the option to plug in your regular keyboard and monitor to your laptop, do so.
- The laptop can also be used as a monitor while using a separate keyboard and mouse placed on the desk or on a keyboard tray. It this setup is possible, place the top of the screen at eye level or slightly lower if using bifocals.
- If not, avoid resting on the wrist rest areas WHILE typing. Try using whole hand and arm movements to navigate around the keys.
- If you are unfamiliar with your laptop keyboard, try watching your hands at first to learn where all the keys are placed. Some of them may have been rearranged.
- As the touch on lap tops are often lighter, and the key bed is shallow, be especially careful not to pound on the keys.
- If your laptop has a glide point that is difficult to move, try plugging in an external mouse, and / or try using key commands instead.
- When looking down at the screen, be careful not to bend your neck and head forward to see. Try tucking in your chin to look down, keeping your head and neck more or less balanced over the spine.
- Clean the screen frequently as dust can make it difficult to read and may increase eyestrain. Be sure to use an appropriate anti-static cleaning material that is safe for laptop computers.

Using laptops "on the go"

- When traveling, make sure to set yourself up as ergonomically as possible. If you are in a hotel, conference room, or any other facility, don't settle for resting your laptop on a desk, table, counter, or surface that is high or far from reach. Your options include:
- Using a pillow, pad or even folded towels, to raise your chair high enough so that your elbows are level or slightly higher than the keyboard (elbows at approximately 90 degrees).

- o Using a pillow, pad or even folded towels, to raise your chair high enough so that your elbows are level or slightly higher than the keyboard (elbows at approximately 90 degrees).
  - o Asking if the hotel has a docking station for laptops. If not, ask if there are computer workstations for desktops (many hotels are computer user friendly) and plug into their keyboard and monitor.
- If you can't find a surface low enough, or a chair high enough, then your lap is always an option.
  - o Sit so that your knees and hips are level. This will allow the laptop to rest comfortably on your lap.
  - o Again, be careful with your neck. Look down at the screen by tucking your chin in as opposed to bending your entire neck down, as this can cause strain and fatigue to the neck and shoulder area.
  - o Try using a chair that does not have armrests to give you room to move your arms.
  - o If the seat is too deep add a pillow for back support.
- If you elect to place your computer on the food tray, and it is too high to achieve comfort, try raising your seat height by folding one or two blankets under you. If that doesn't work, you may be best off using your lap. This strategy may reduce circulation around the laptop and allow it to heat up. Placing a hard surface between the laptop and the shallow pillow can help.

Transportation

- Laptops are often heavy which means you should avoid carrying them with a handle. Try carrying the laptop on your shoulder using a bag with a padded shoulder strap. Switch shoulders frequently.
- When possible, eliminate the need to carry a laptop by using lightweight portable media storage (flash drive, memory stick, etc.).
- Consider the weight of the laptop when purchasing.

Take Breaks

- Take frequent breaks. Stand up and stretch. If you feel any strains or pains, stop what you are doing and experiment with different positions. The same rules of healthy computer use apply to laptops as well as desktops. Remember to pace yourself when using either one.